



System And Method For Detecting Emitter  
Signals Using Real Antenna Data  
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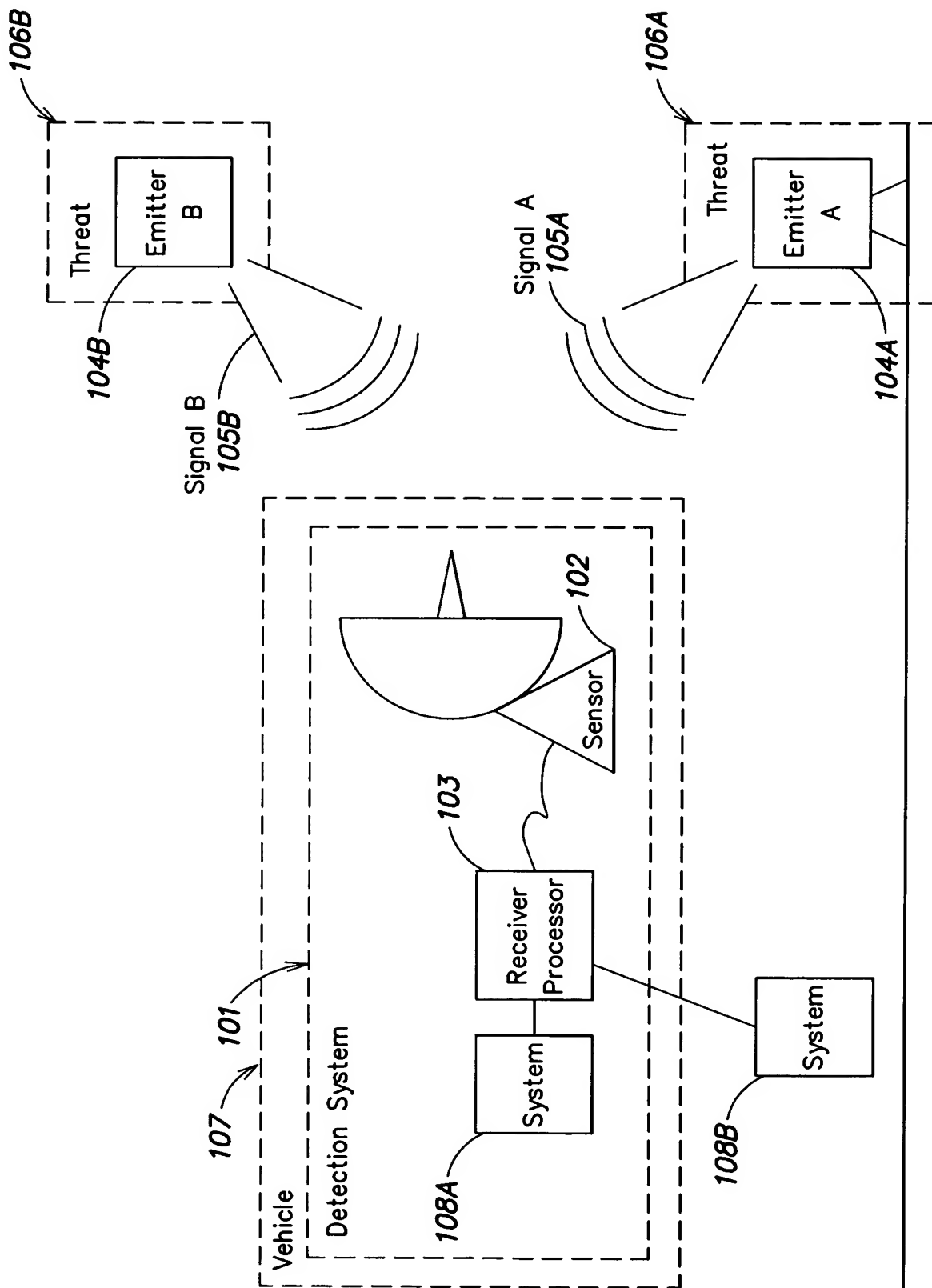


FIG. 1

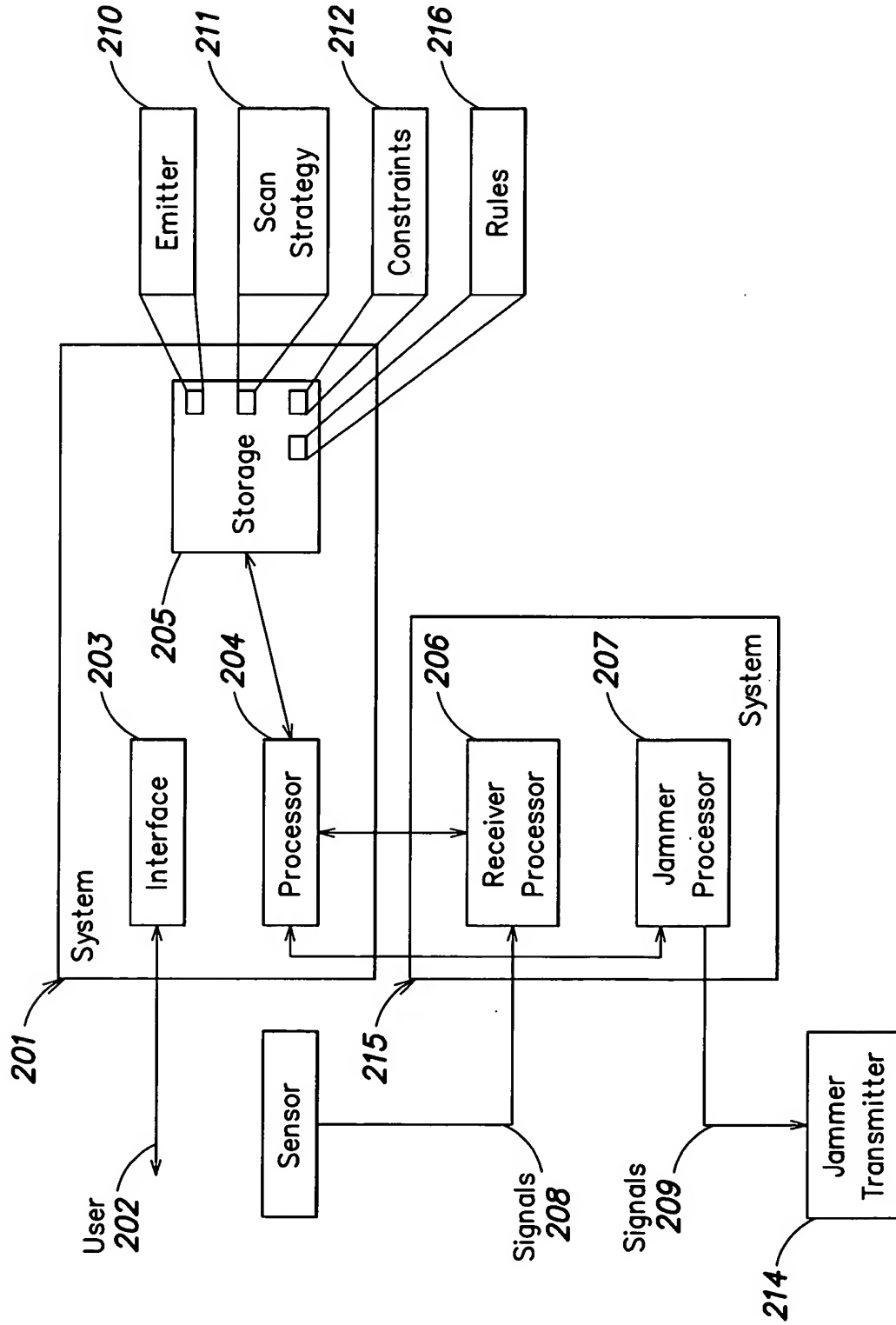
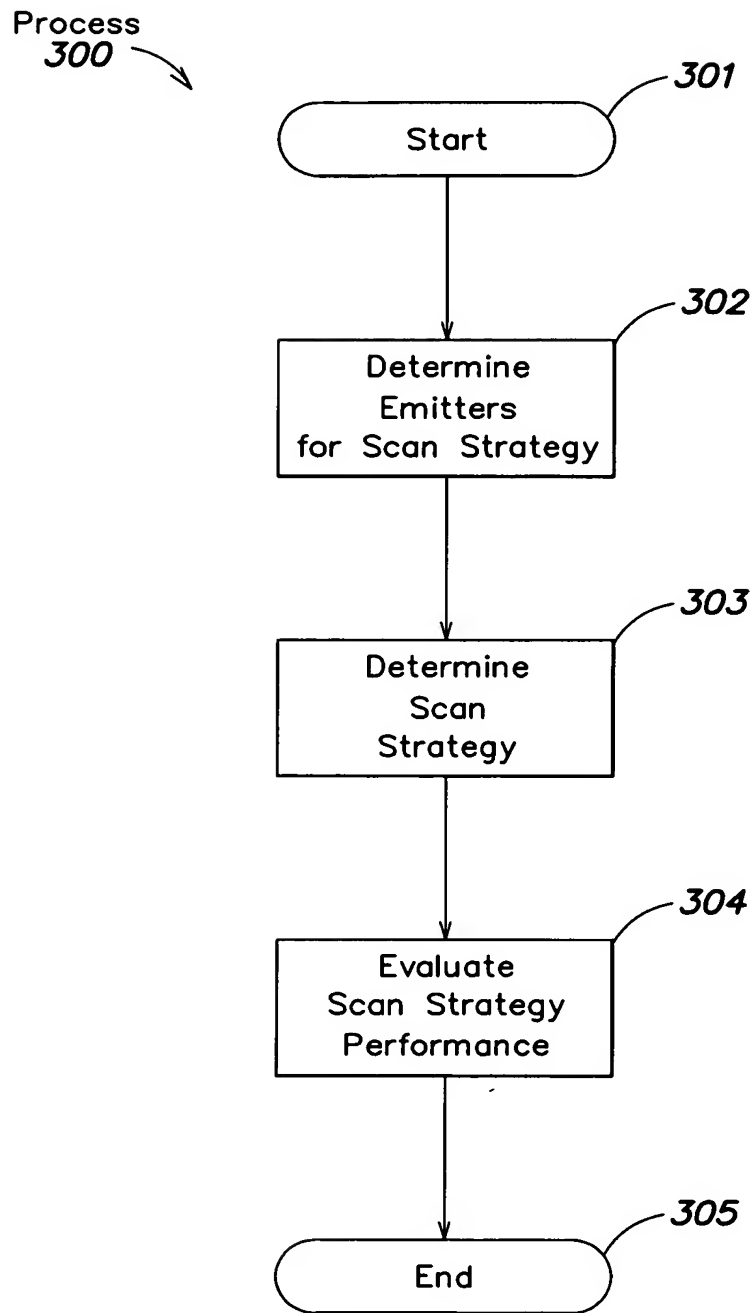


FIG. 2



**FIG. 3**

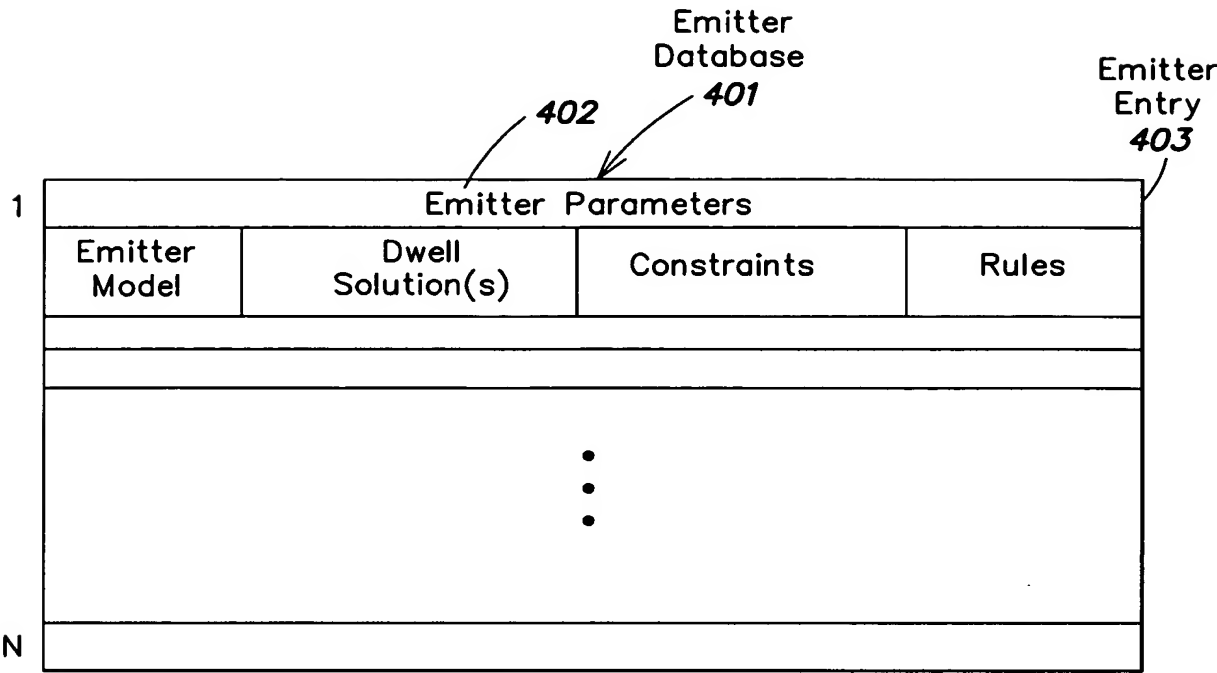


FIG. 4

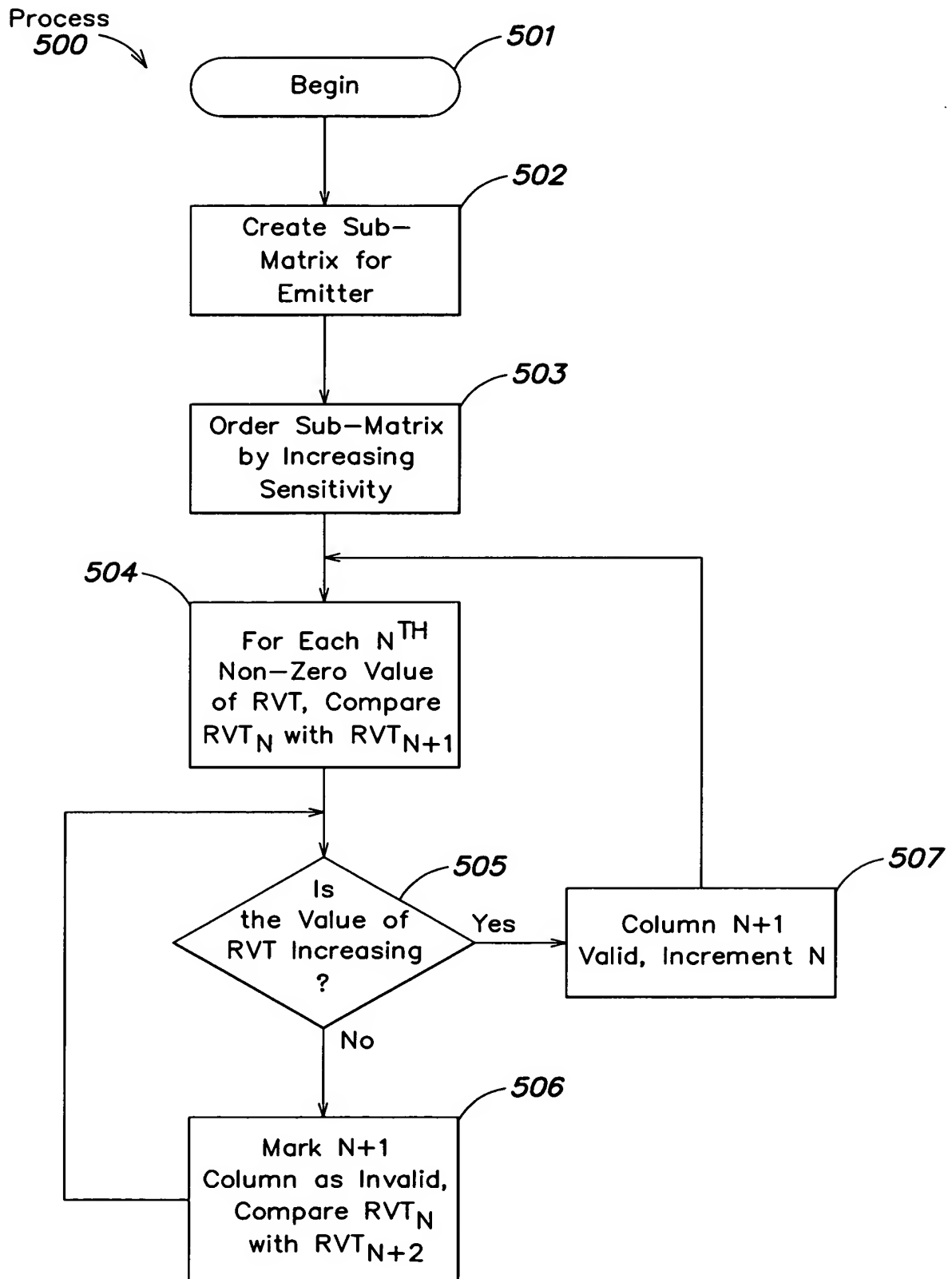
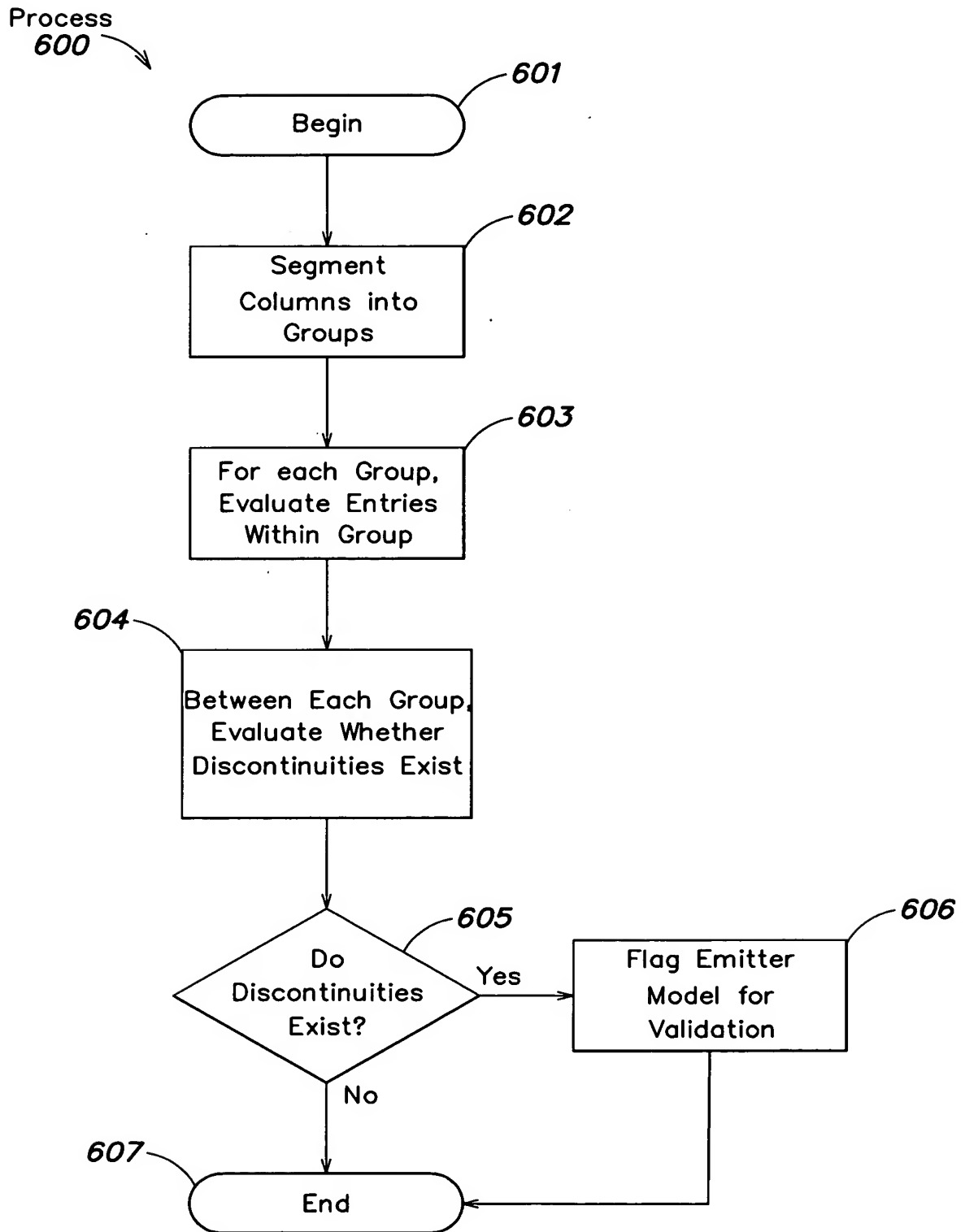
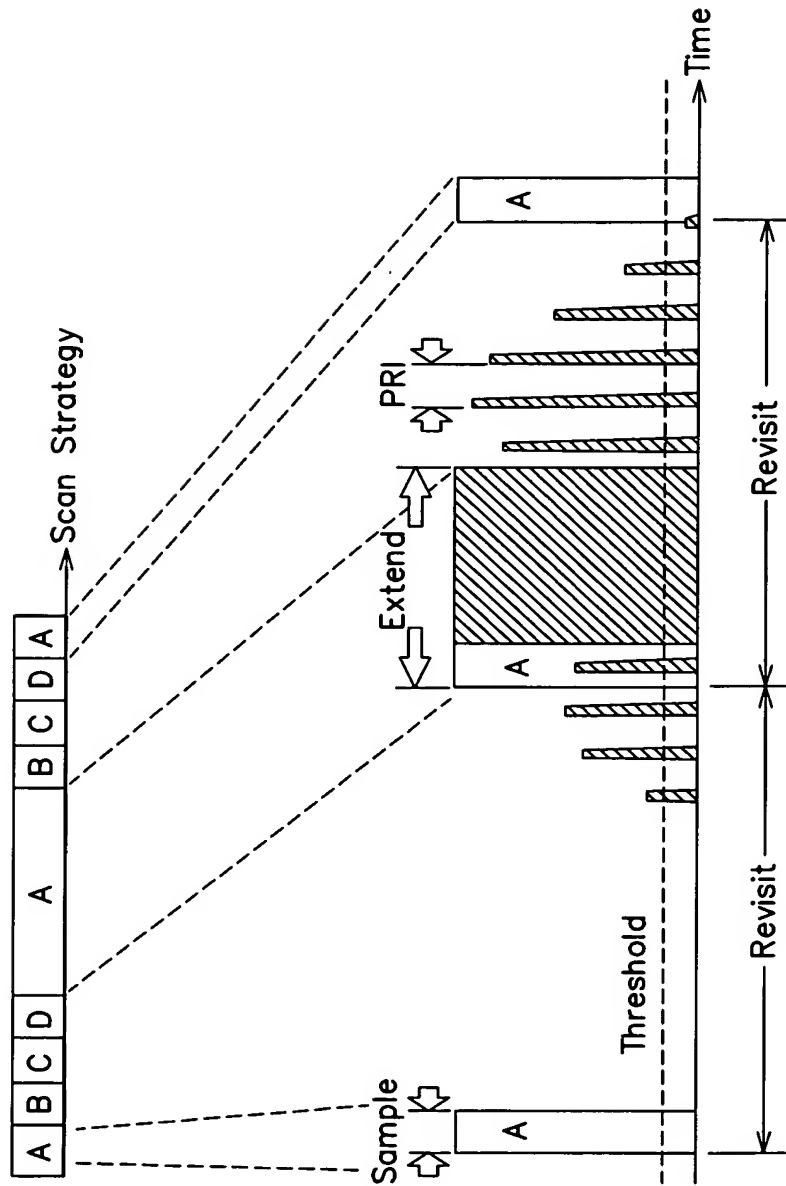


FIG. 5



**FIG. 6**



NO PULSE GROUPING LOGIC:

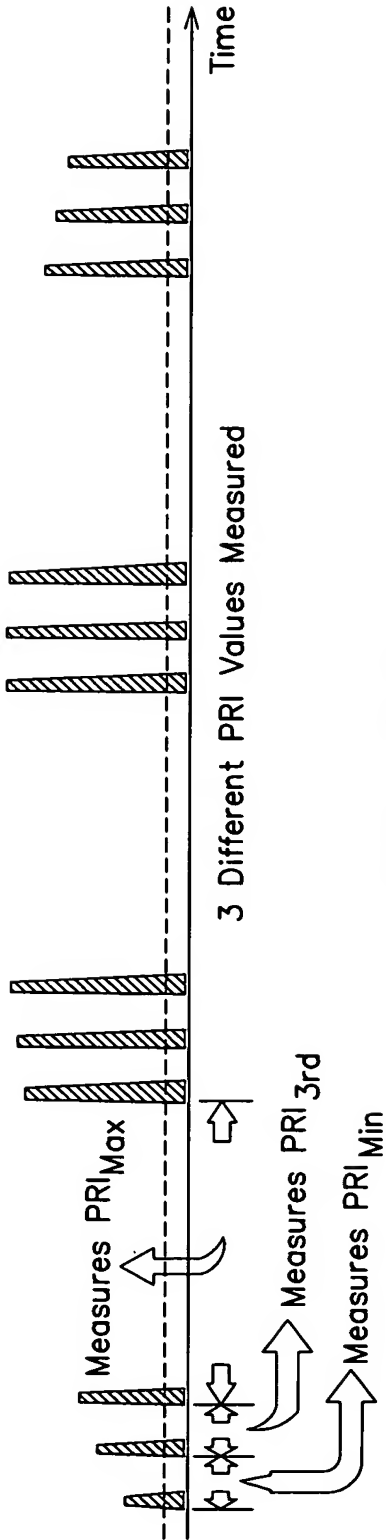


FIG. 8A

WITH PULSE GROUPING LOGIC:

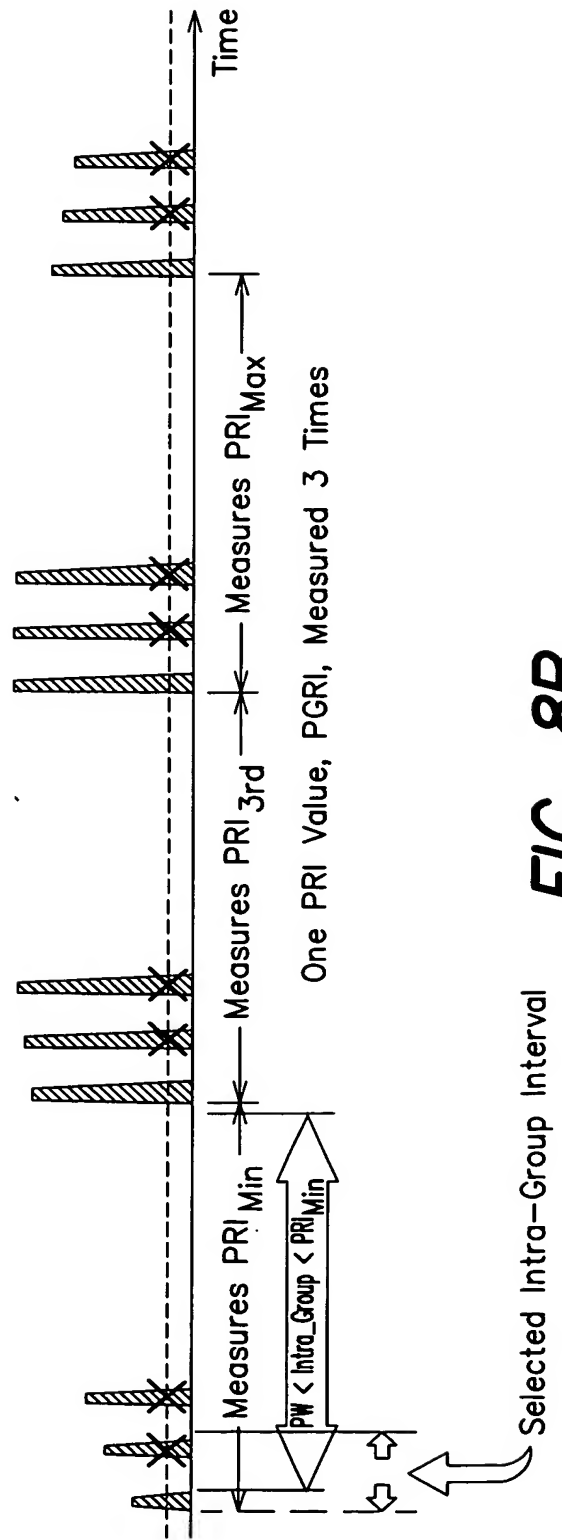


FIG. 8B



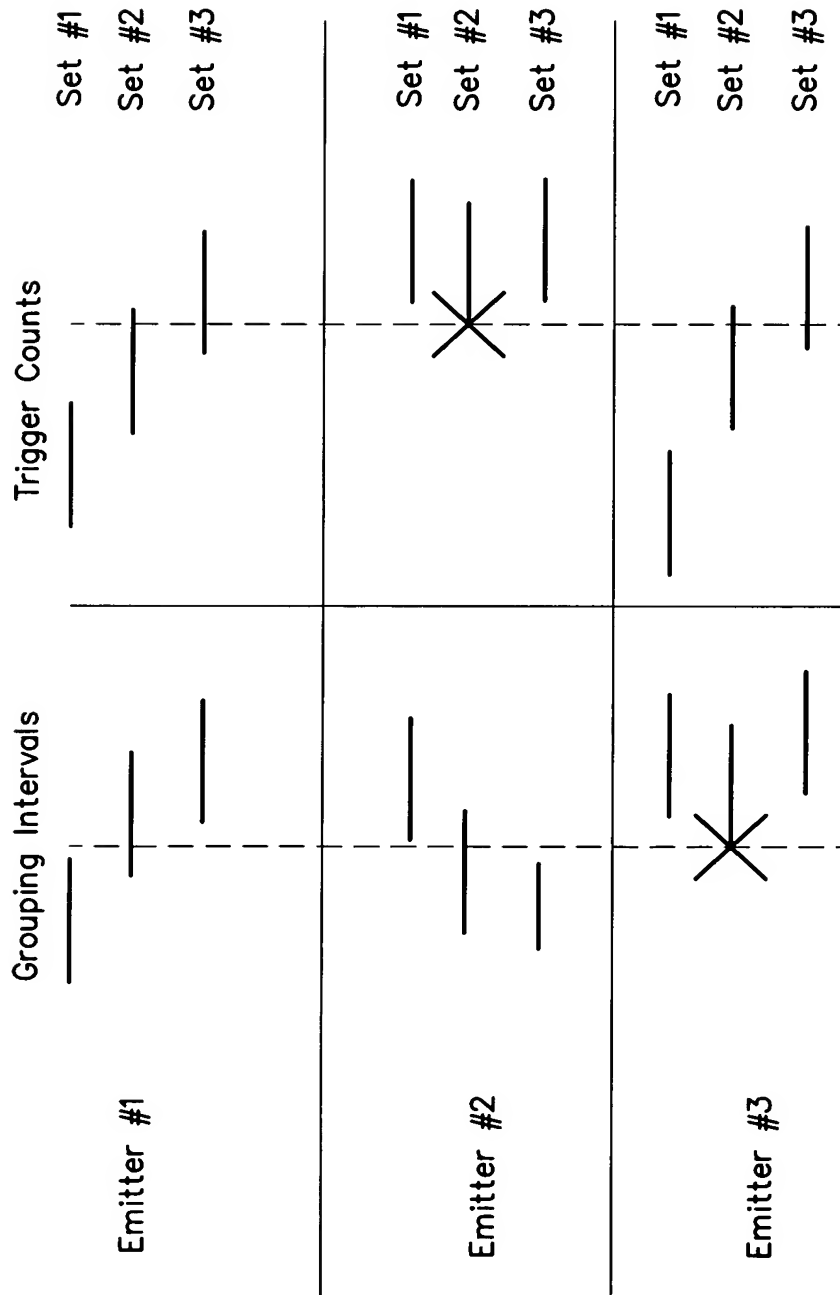


FIG. 9

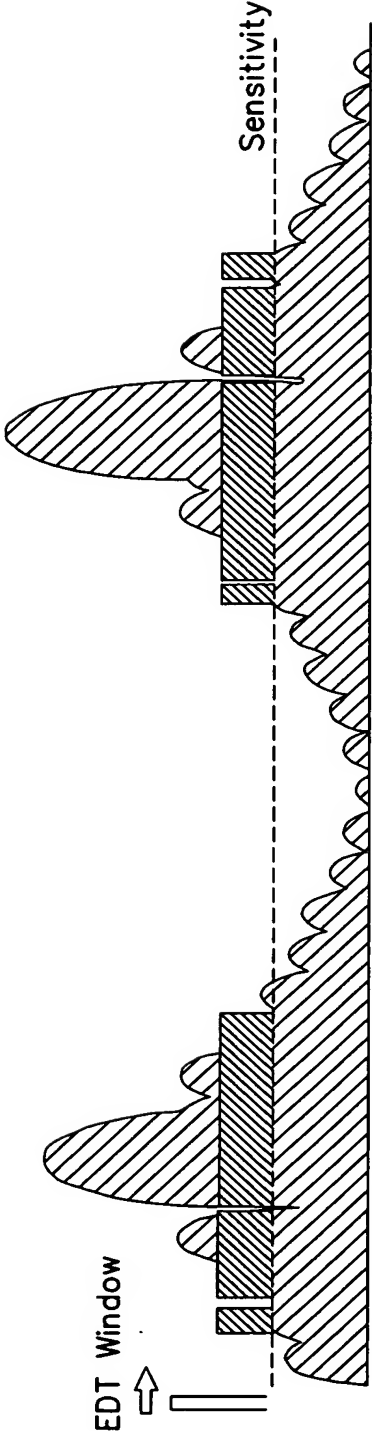


FIG. 10A

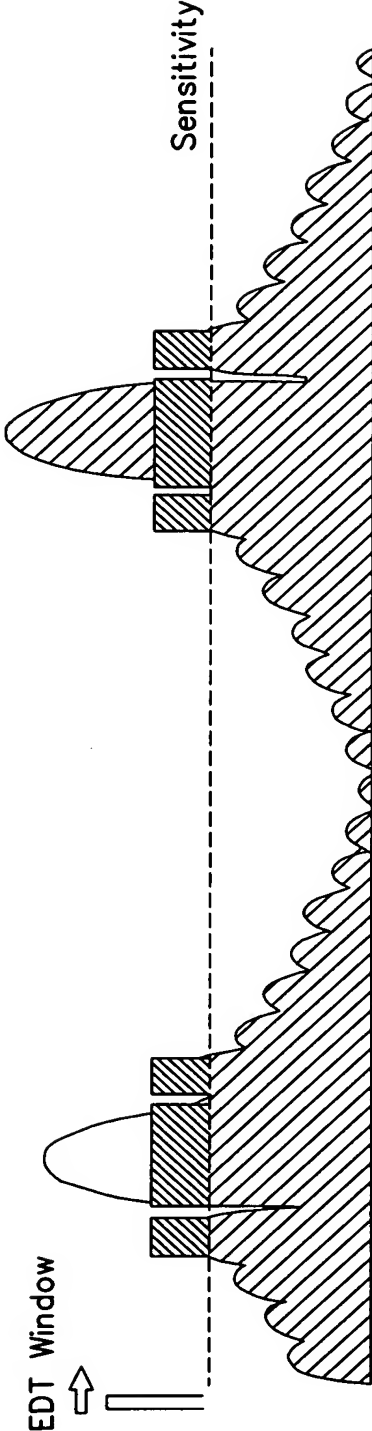
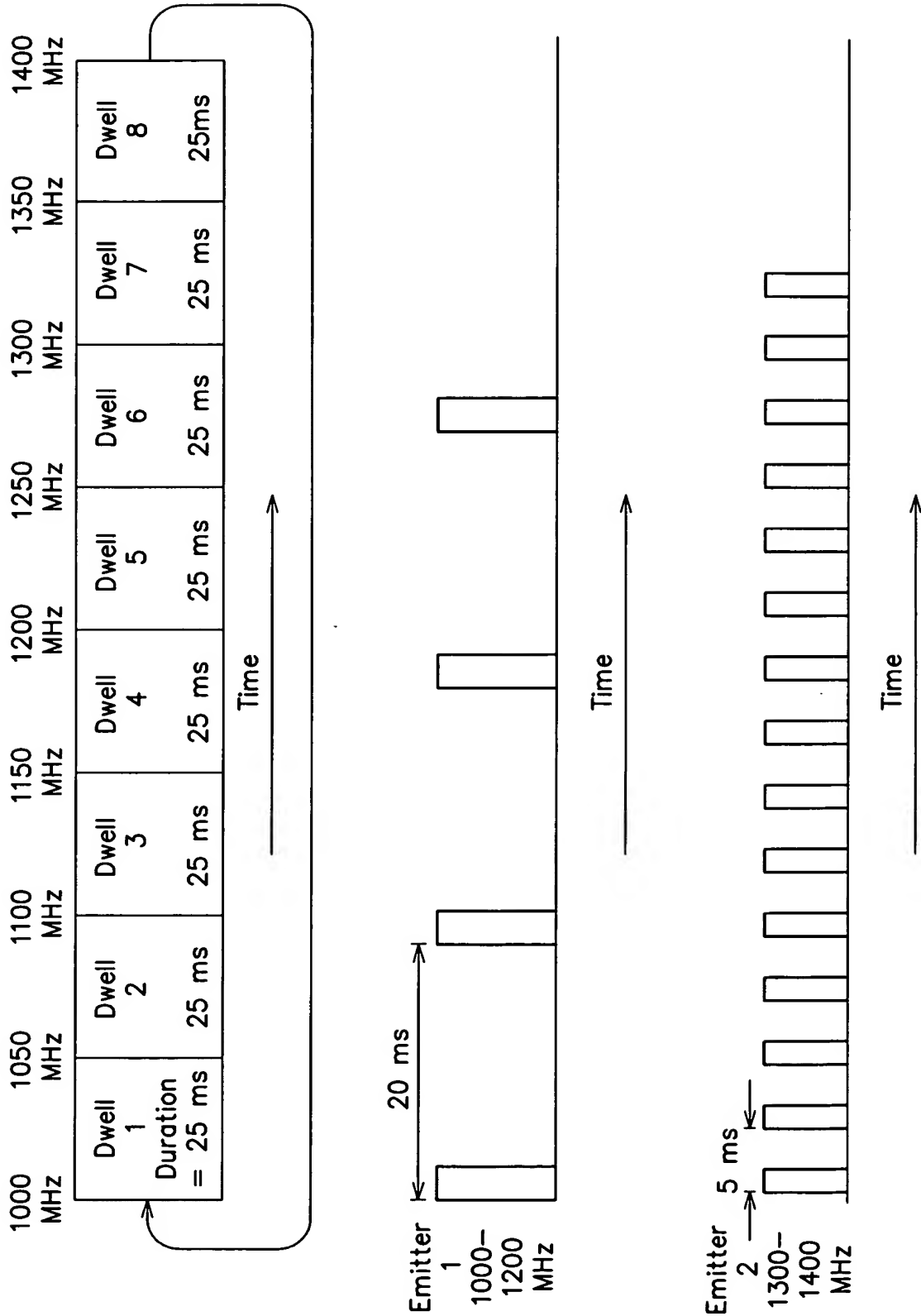


FIG. 10B



**FIG. 11**

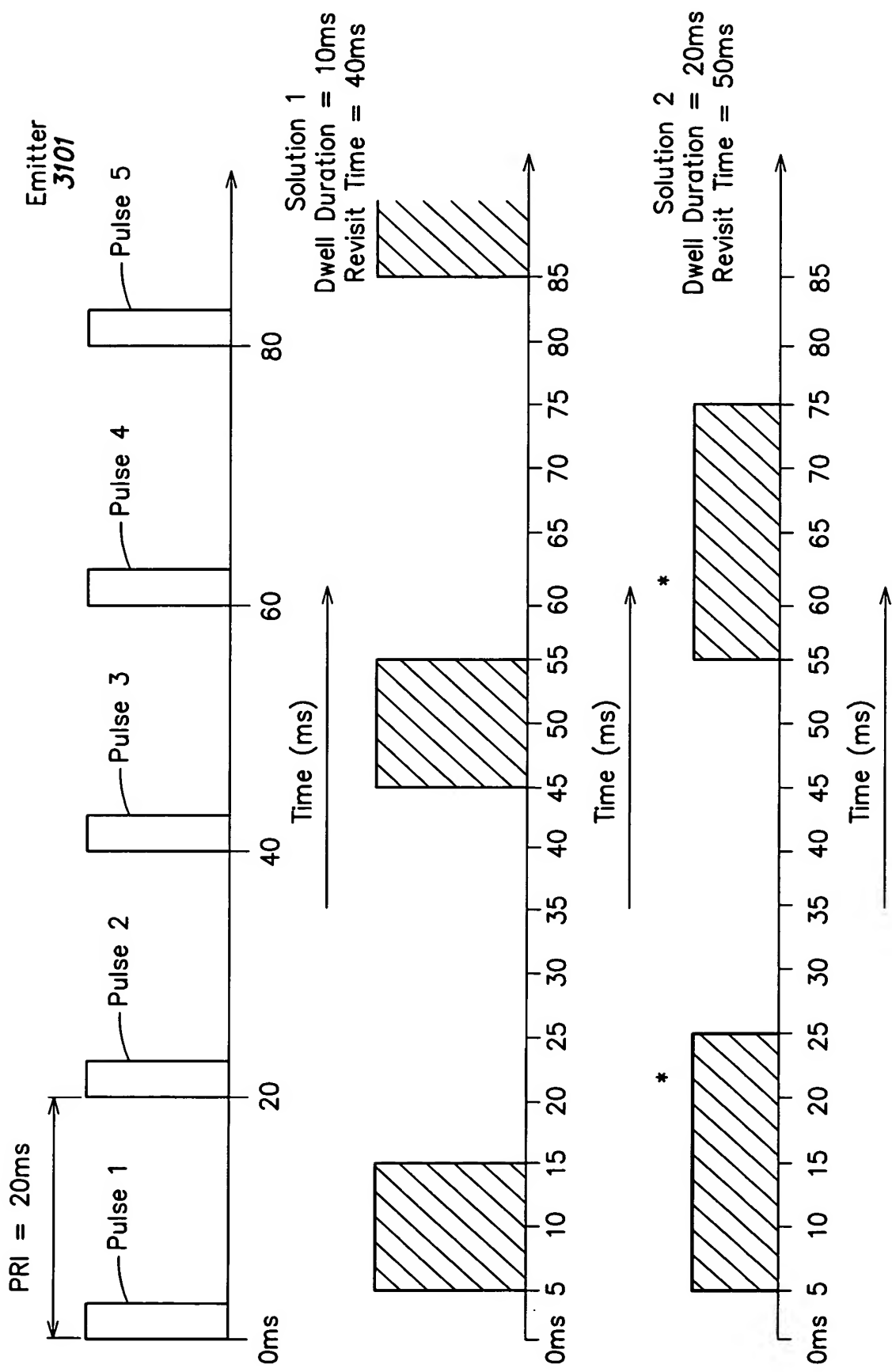


FIG. 12

4000

Emitter Name	Detecting Method 1 250MHz IF/ 15MHz VBW RVT	Detecting Method 2 30MHz IF/ 15MHz VBW RVT	RF Min (MHz)	RF Max (MHz)	Min MDT (ms)
E1	100 ms	650 ms	1000	1300	3
E2	120 ms	780 ms	1220	1350	5
E3	110 ms	330 ms	1510	1810	2
E4	130 ms	390 ms	1730	1860	4

**FIG. 13**

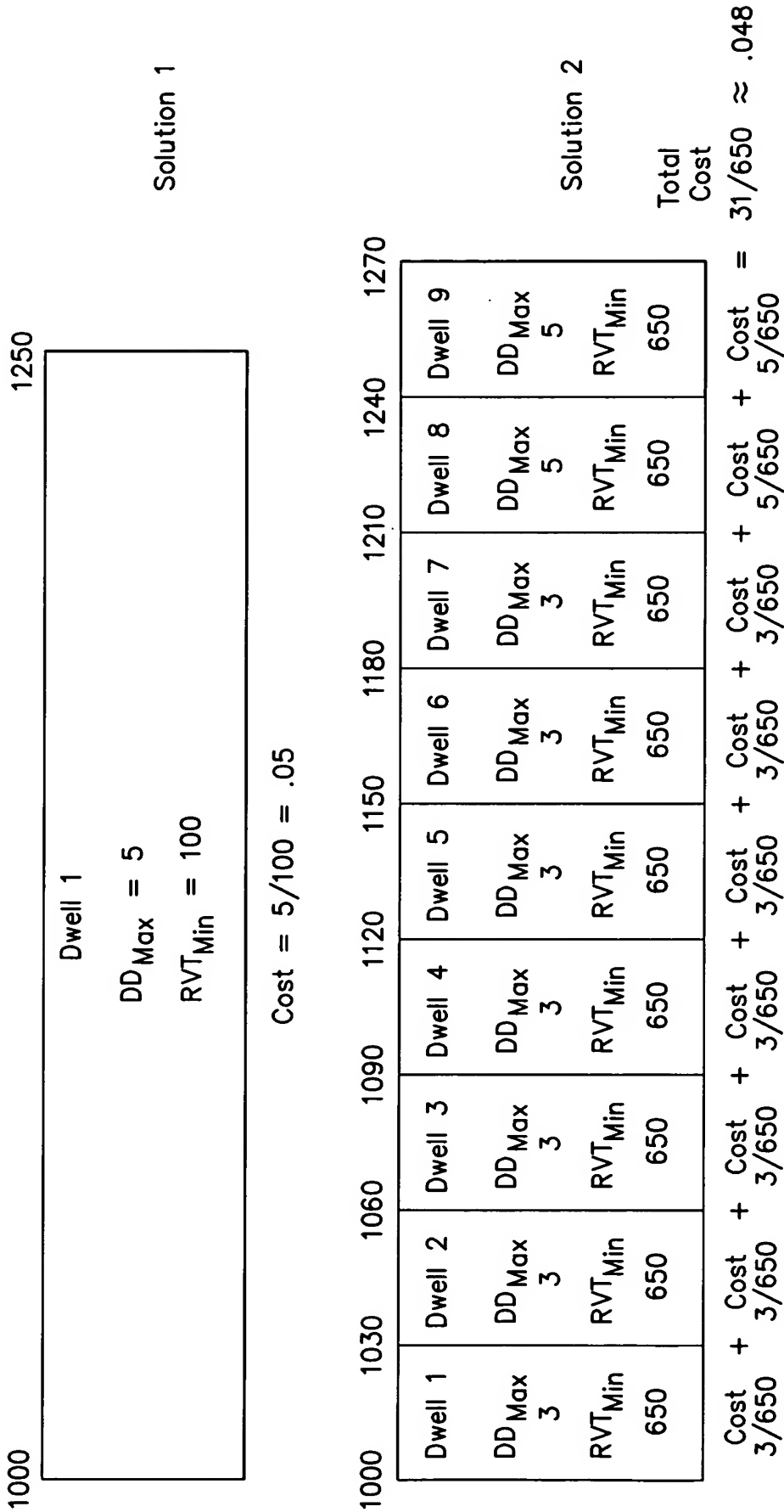


FIG. 14A

1510

1760

Dwell 1		
DD <sub>Max</sub> = 4 ms		
RVT <sub>Min</sub> = 330 ms		

Solution 1

$$\text{Cost} = 4/330 = .01\overline{2}$$

1510      1540      1570      1600      1630      1660      1690      1720      1750      1780

Dwell 1	Dwell 2	Dwell 3	Dwell 4	Dwell 5	Dwell 6	Dwell 7	Dwell 8	Dwell 9
DD <sub>Max</sub> 2	DD <sub>Max</sub> 2	DD <sub>Max</sub> 2	DD <sub>Max</sub> 2	DD <sub>Max</sub> 2	DD <sub>Max</sub> 2	DD <sub>Max</sub> 2	DD <sub>Max</sub> 4	DD <sub>Max</sub> 4
RVT <sub>Min</sub> 330 ms	RVT <sub>Min</sub> 330 ms	RVT <sub>Min</sub> 330 ms	RVT <sub>Min</sub> 330 ms	RVT <sub>Min</sub> 330 ms	RVT <sub>Min</sub> 330 ms	RVT <sub>Min</sub> 330 ms	RVT <sub>Min</sub> 330 ms	RVT <sub>Min</sub> 330 ms

Solution 2

$$\text{Cost} + \text{Cost} + \text{Cost} + \text{Cost} + \text{Cost} + \text{Cost} + \text{Cost} + \text{Cost} + \text{Cost} = 22/330 = .0\overline{6}$$
$$2/330 \quad 2/330 \quad 2/330 \quad 2/330 \quad 2/330 \quad 2/330 \quad 2/330 \quad 4/330 \quad 4/330$$

FIG. 14B

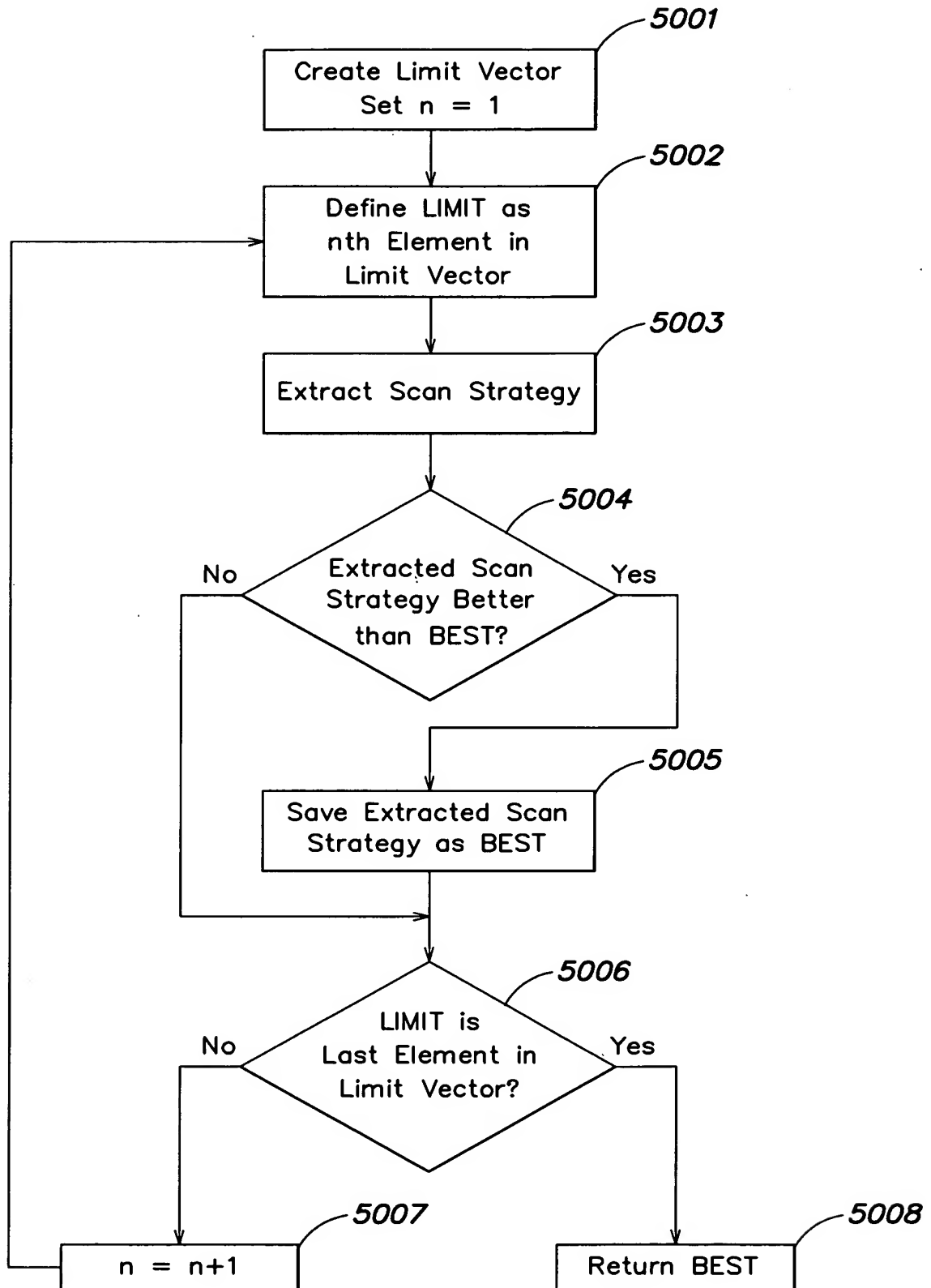


FIG. 15



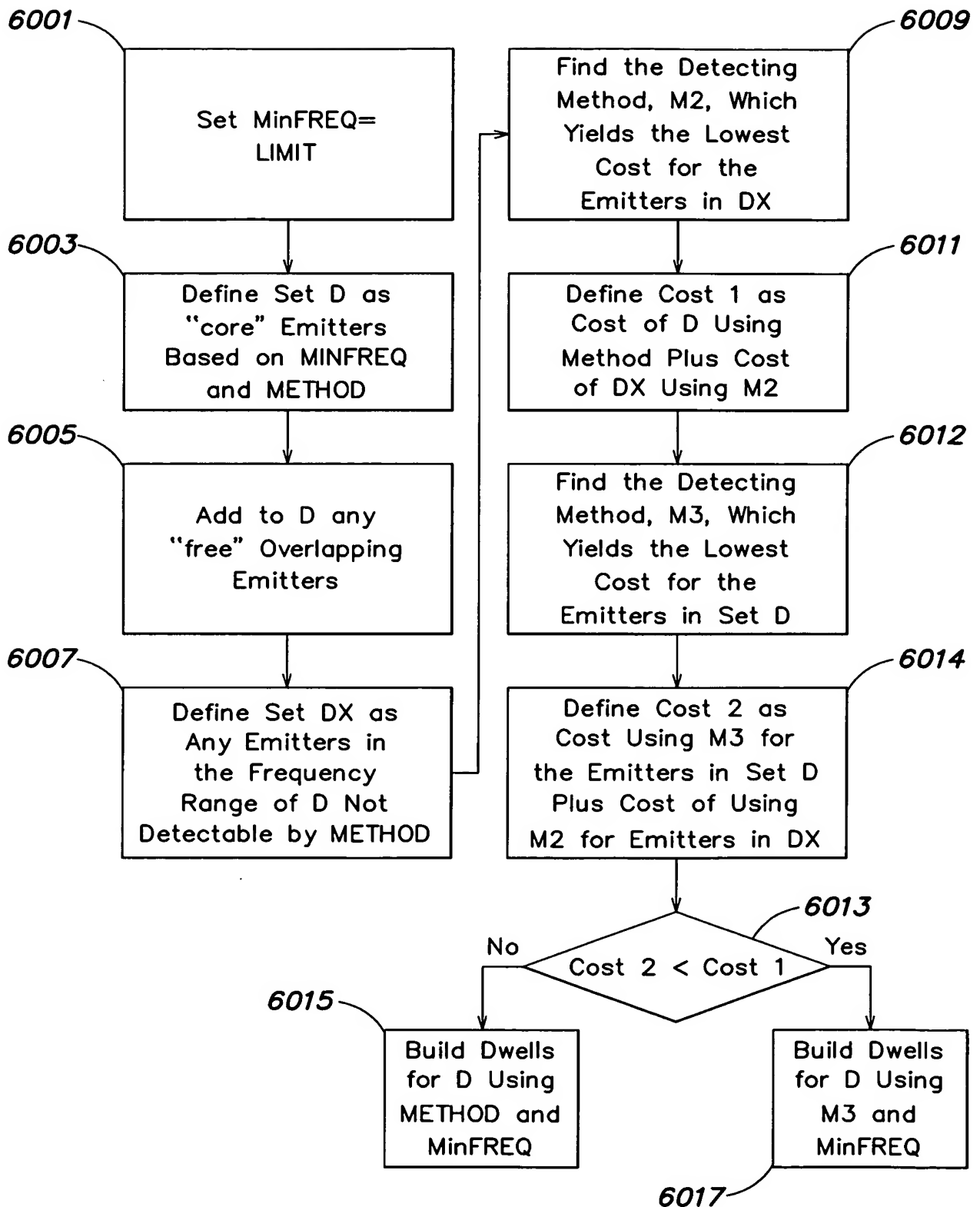
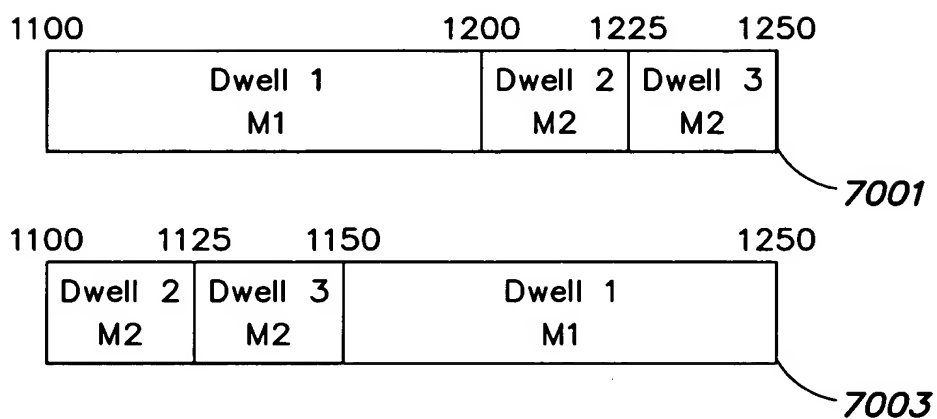
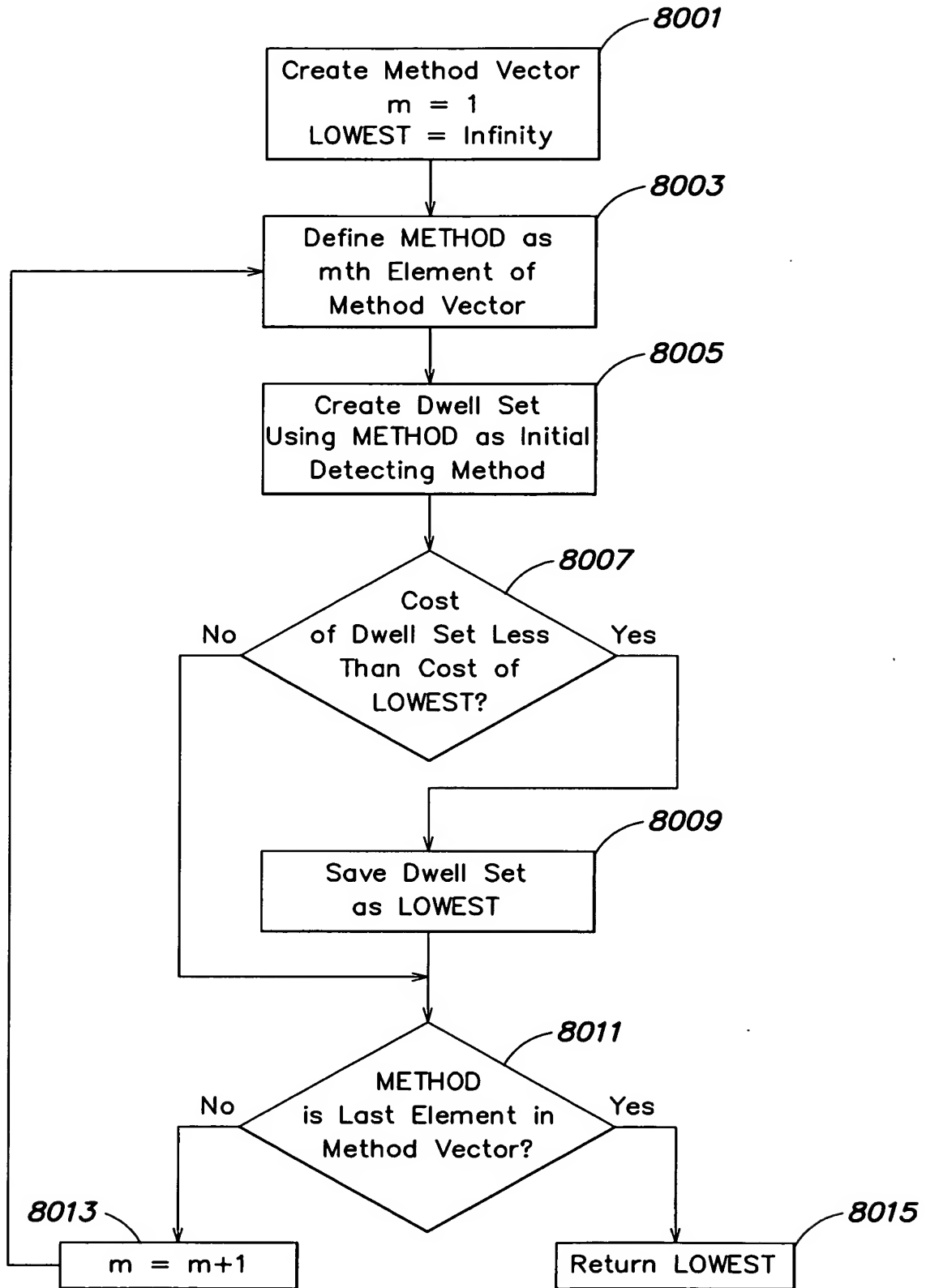


FIG. 16

Name	RF Min	RF Max
E1	1100	1200
E2	1150	1250



**FIG. 17**



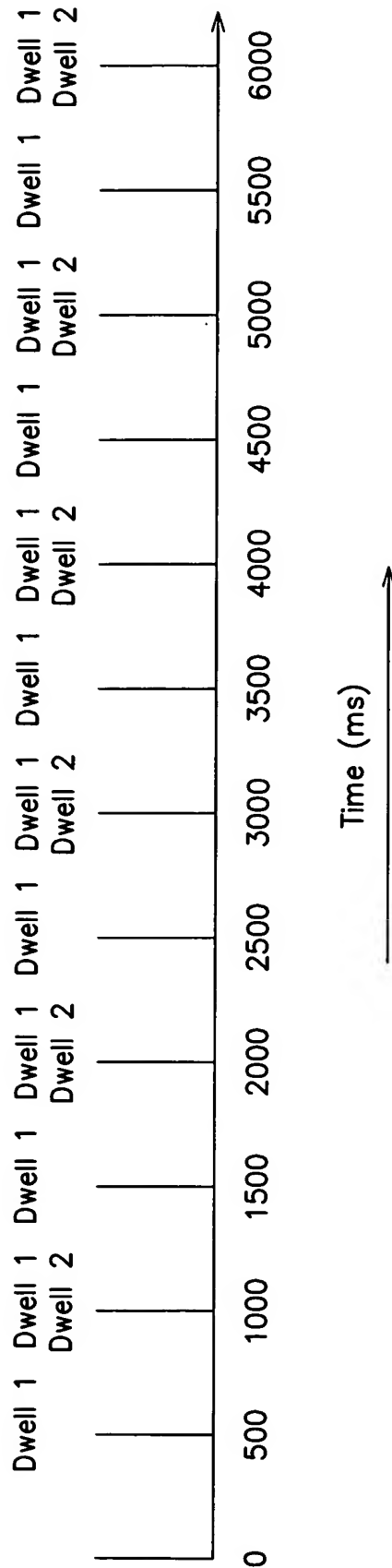
**FIG. 18**

Emitter	Dwell Duration (ms)	Revisit Time (ms)
Emitter 1	1	500
Emitter 2	2	1200

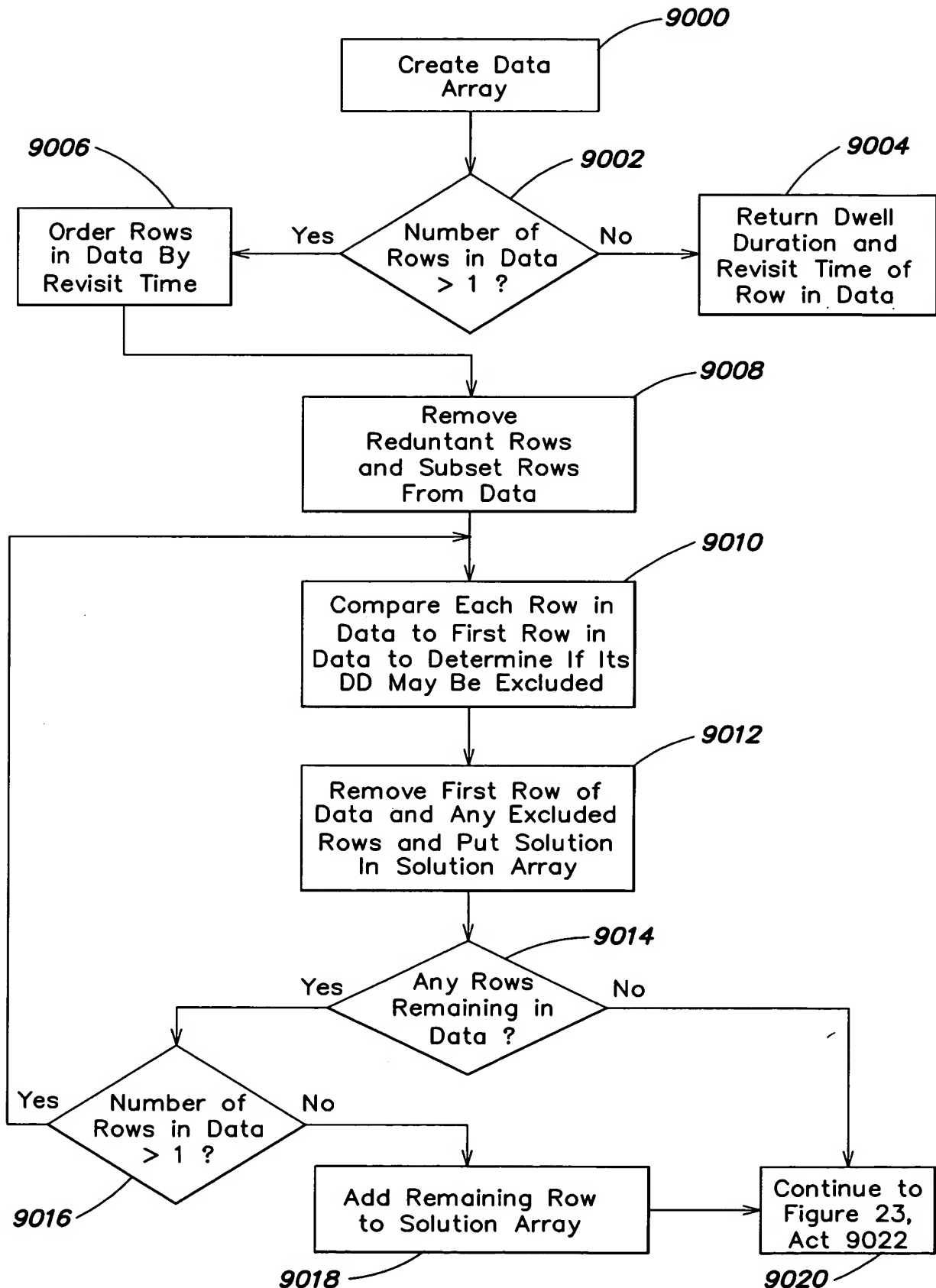
***FIG. 19***

Emitter	Dwell Duration (ms)	Revisit Time (ms)	Cost
Emitter 1	1	500	.002
Emitter 2	5	1000	.005

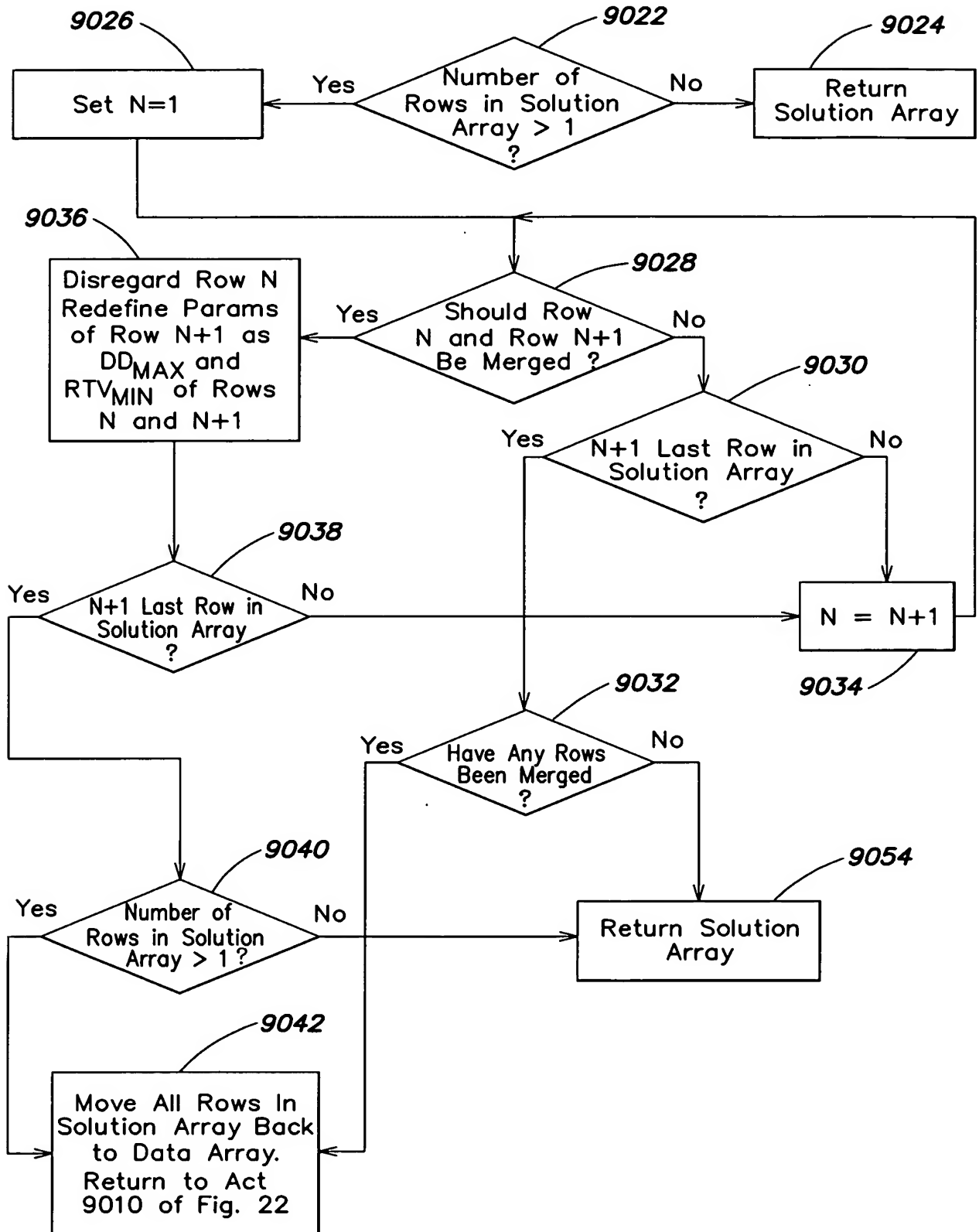
***FIG. 20***



*FIG. 21*



**FIG. 22**



**FIG. 23**

9044

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
3	19	2000
3.05	17	2868

9051

9052

FIG. 24C

9044

Data		
MDT	EDT	RVT
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000
3	19	2000
3	19	2000
3.05	17	2868

9048

9049

9050

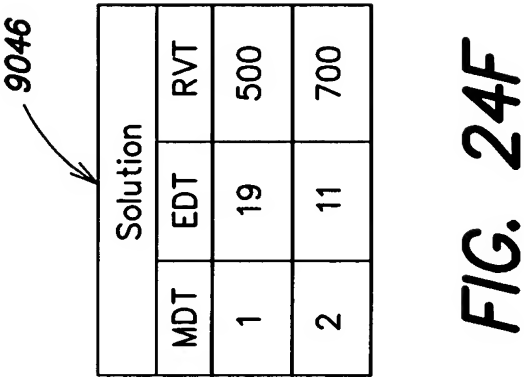
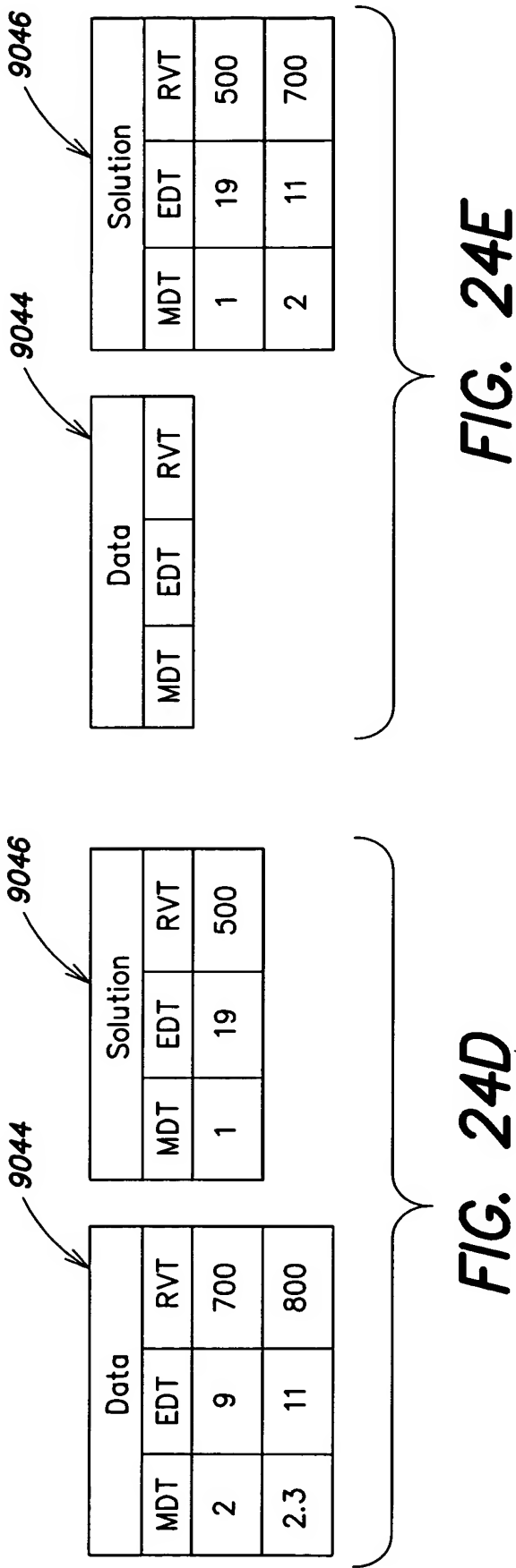
FIG. 24B

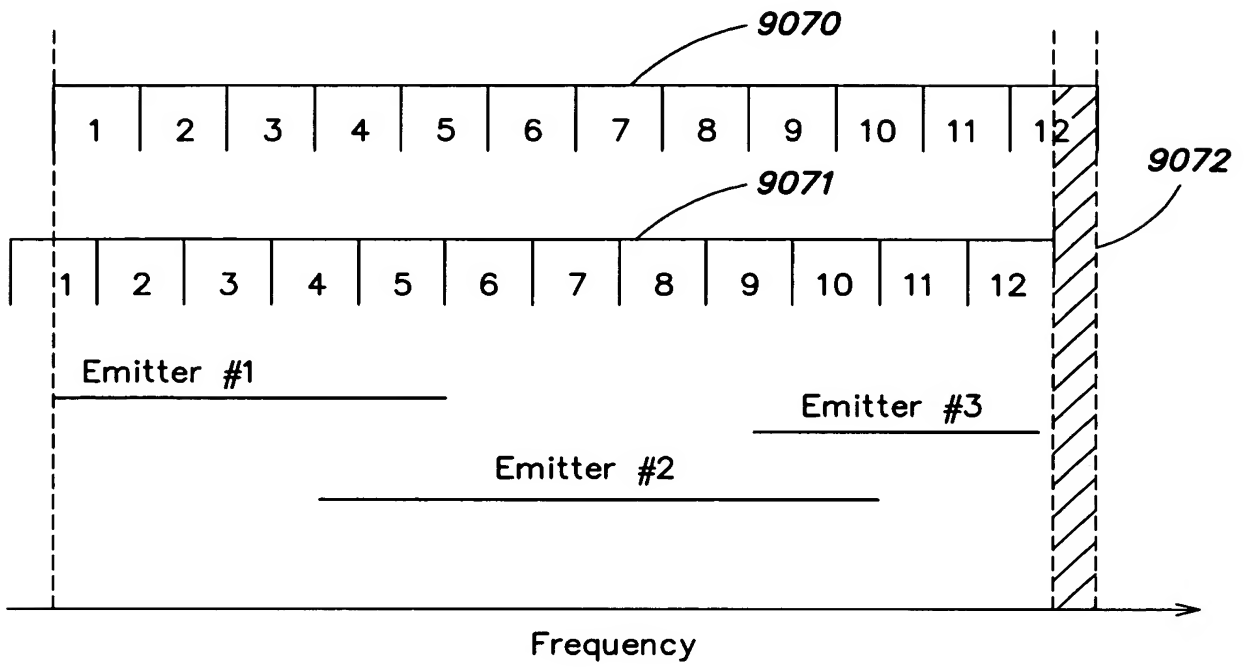
9044

Data		
MDT	EDT	RVT
3.05	17	2868
3	19	2000
3	19	2000
1	7	500
2	9	700
2.3	11	800
0.5	3.5	1000

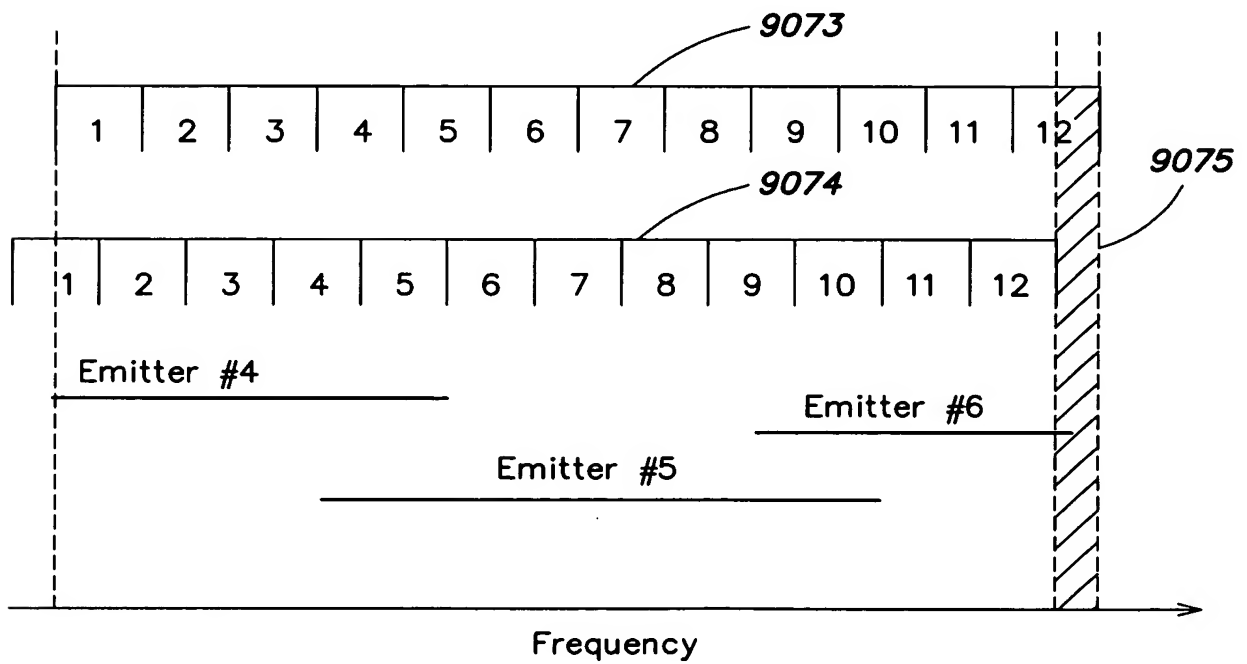
FIG. 24A



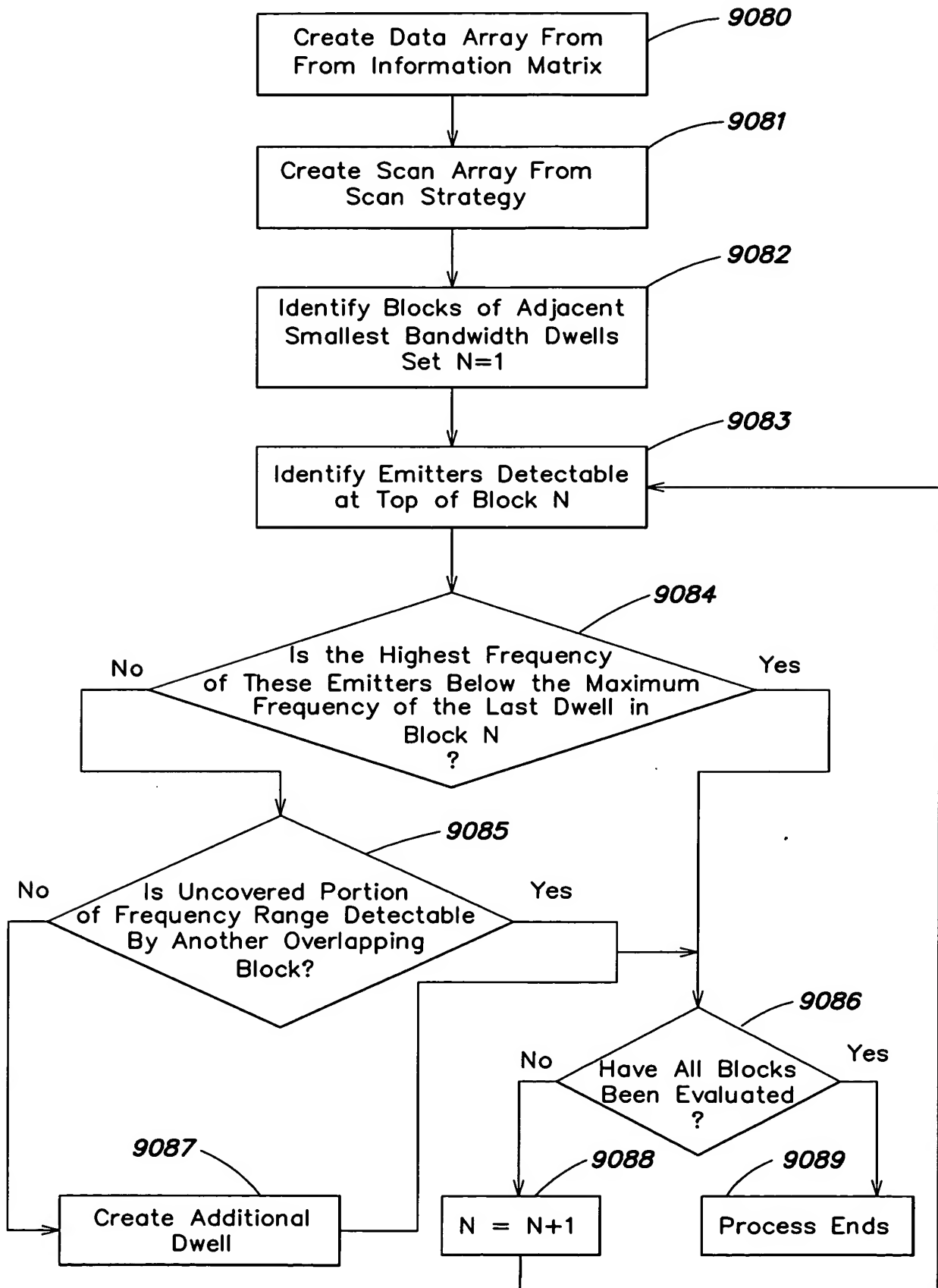




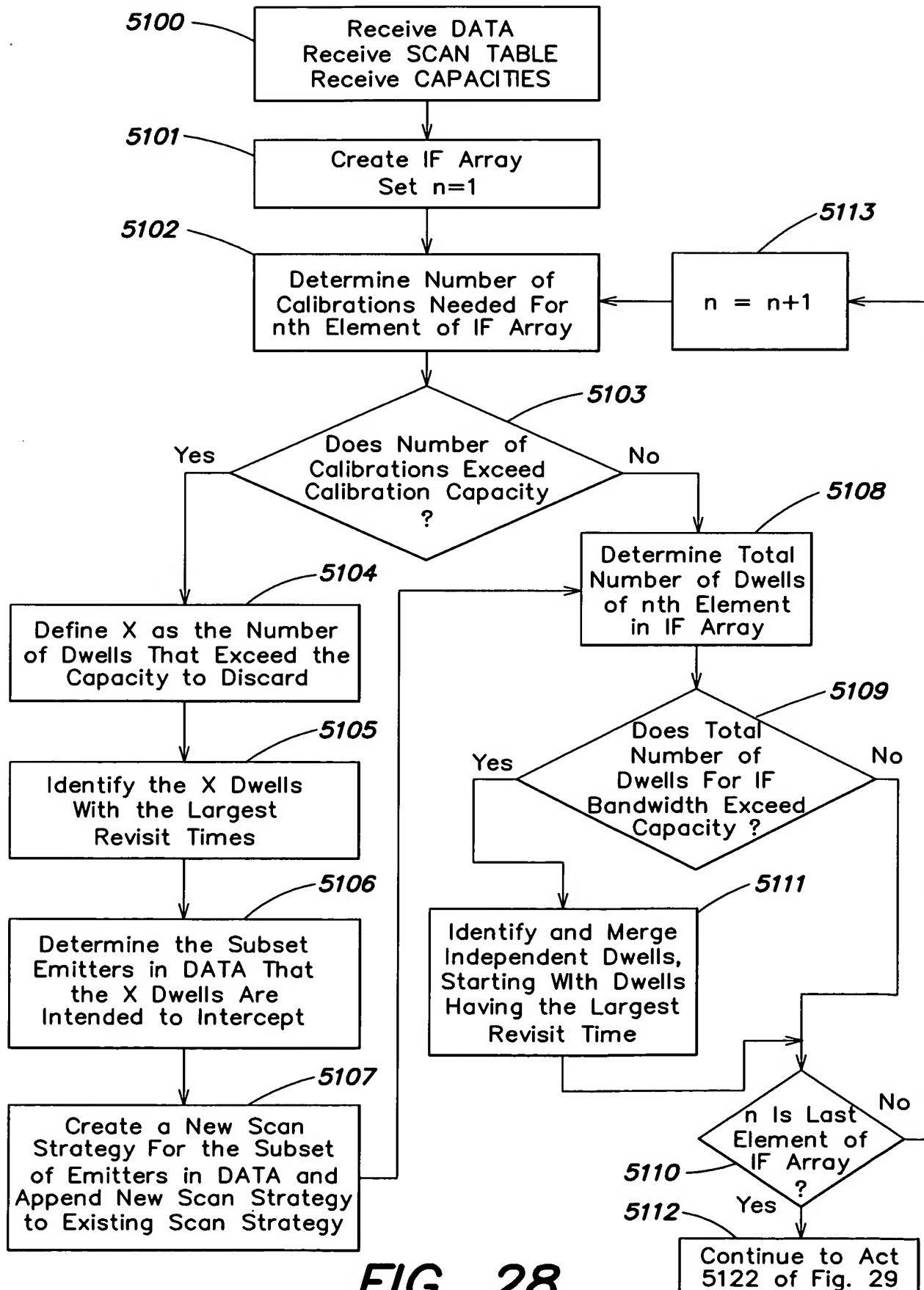
**FIG. 25**

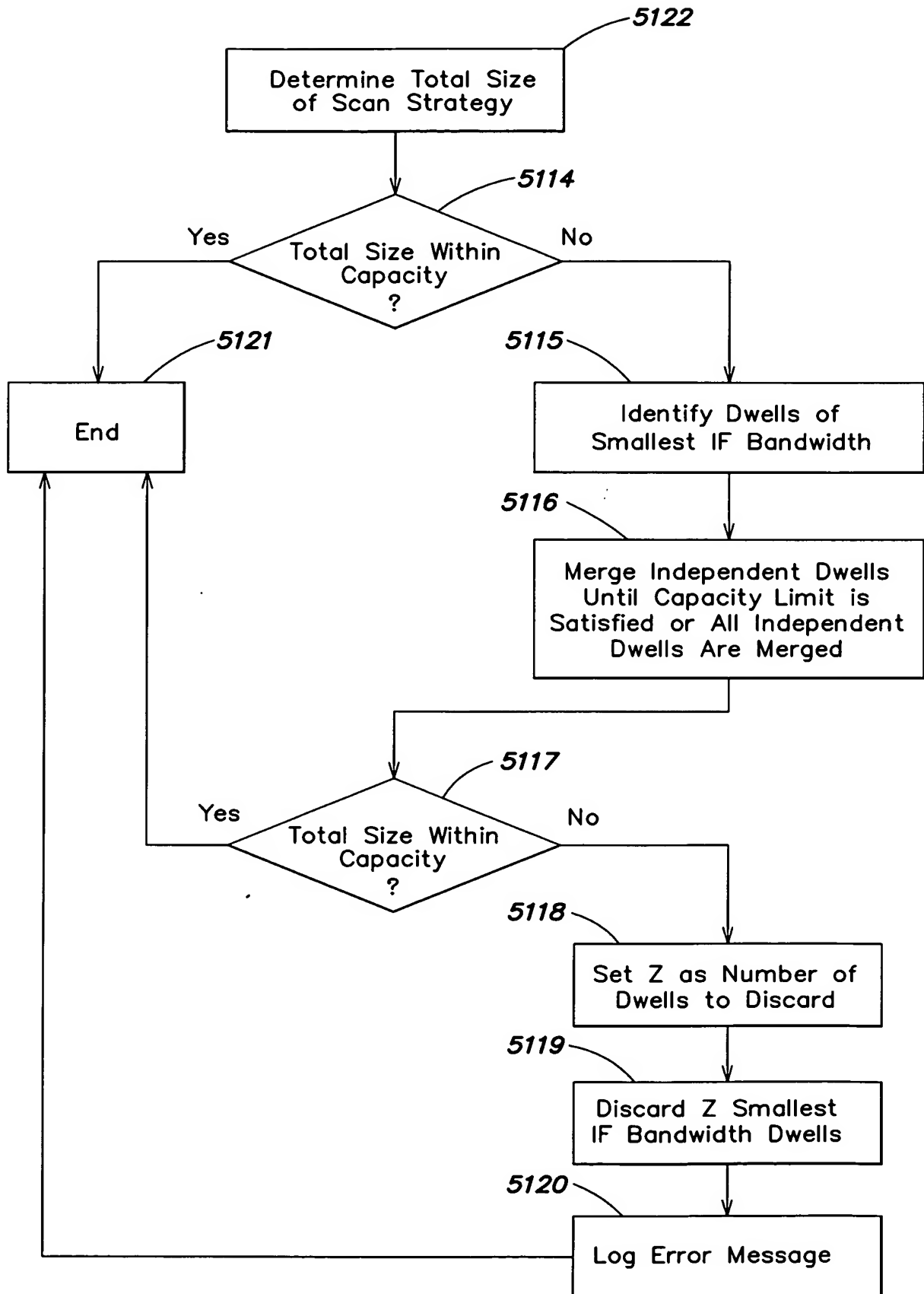


**FIG. 26**

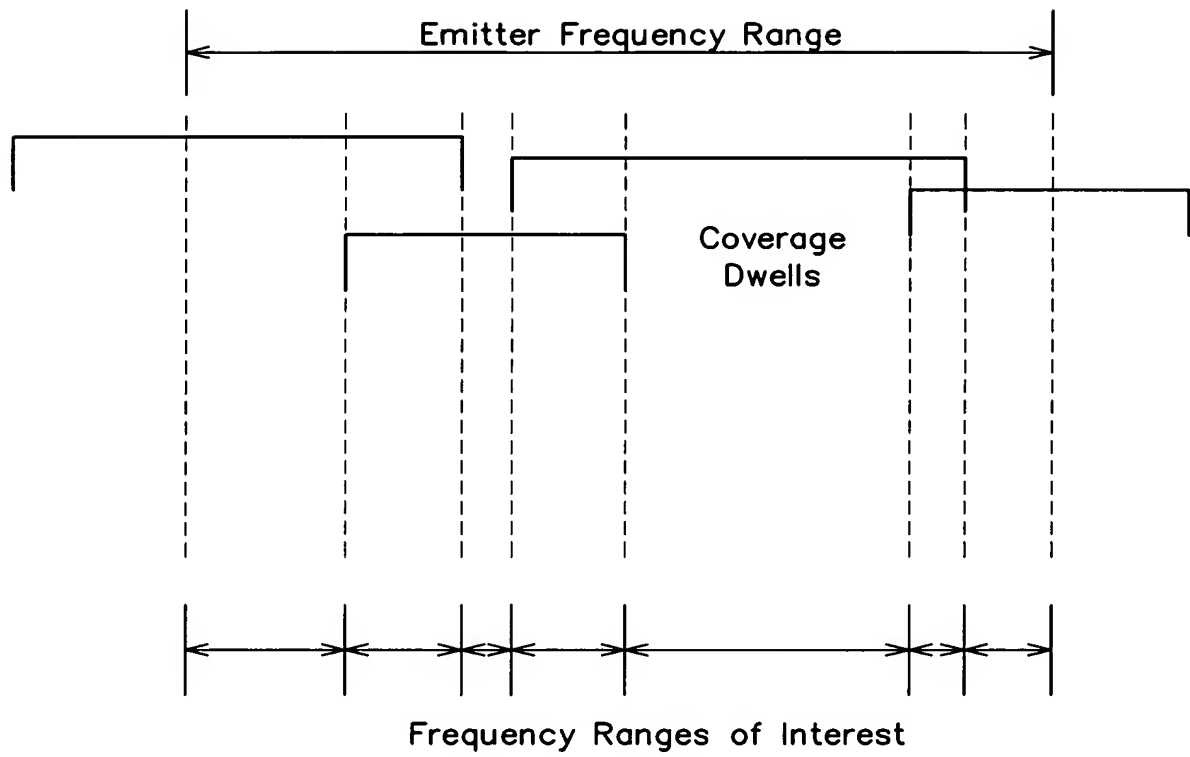


**FIG. 27**





**FIG. 29**



**FIG. 30**

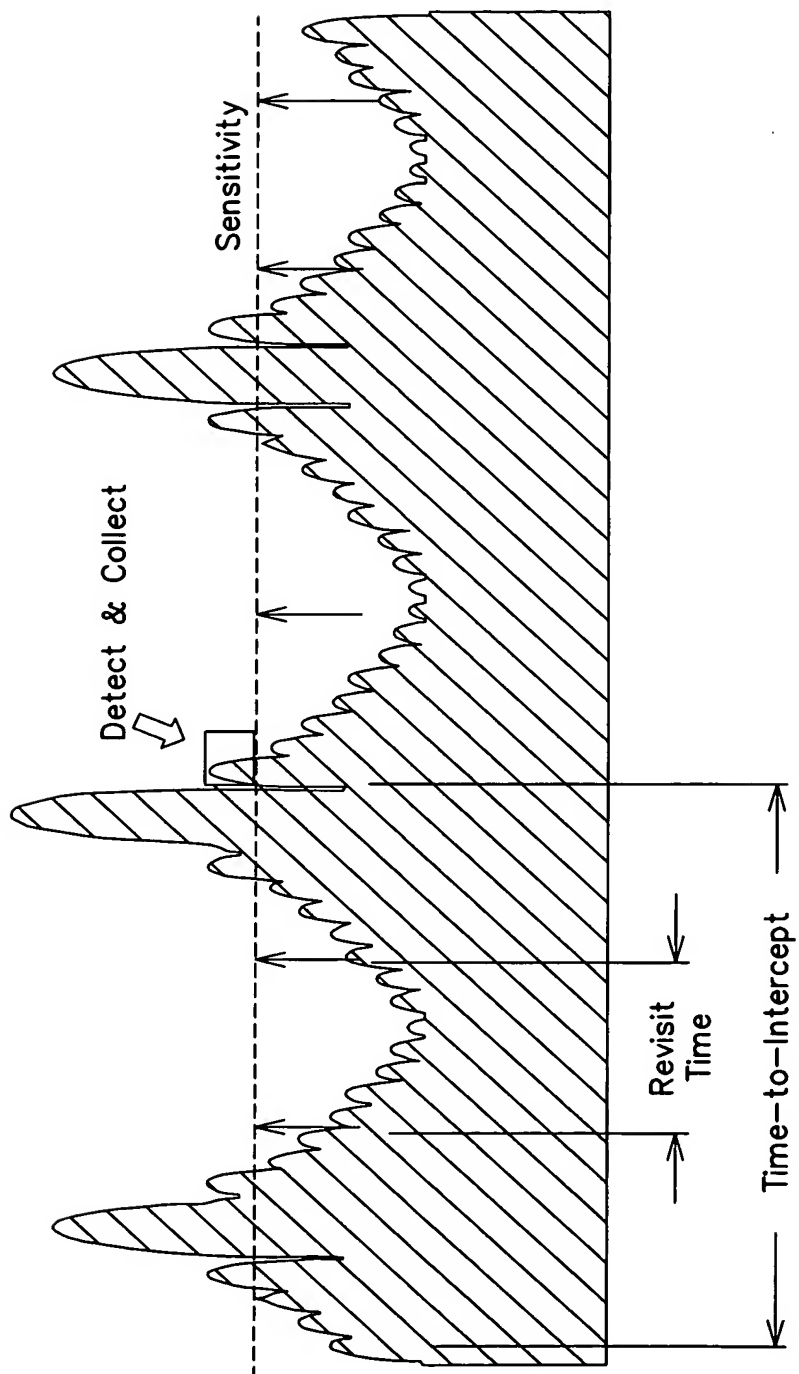


FIG. 31

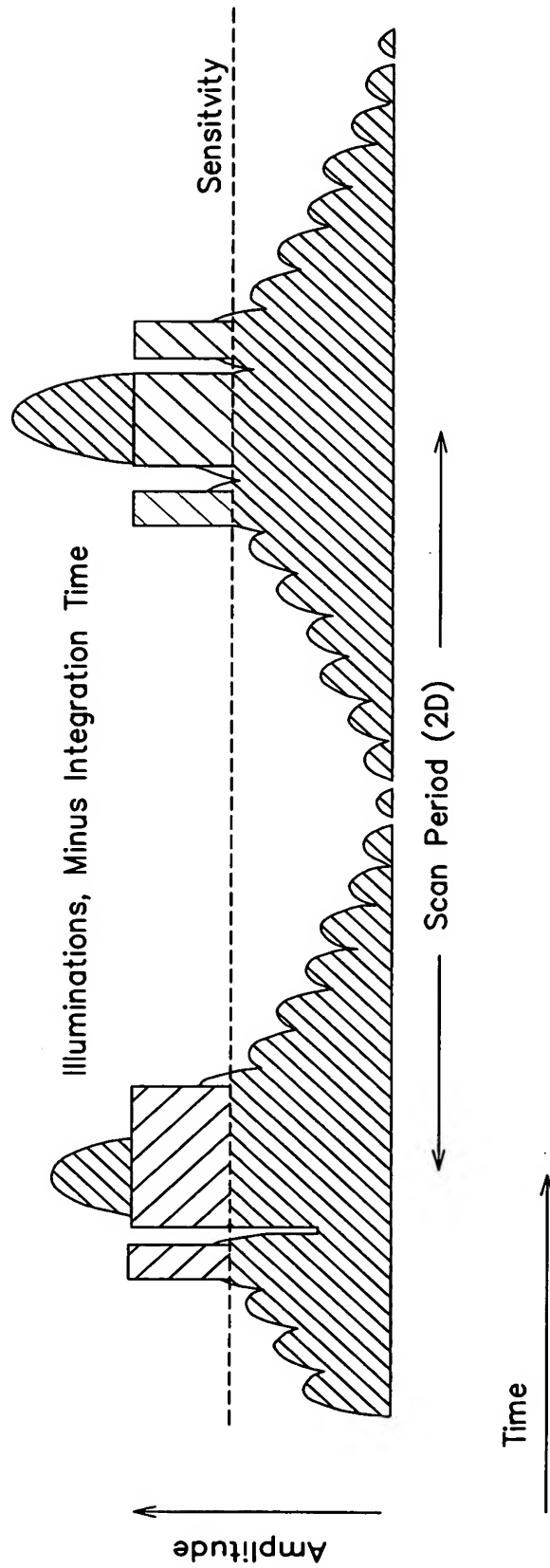


FIG. 32